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Please check your mailing label below. If an "N" appears in the fourth row, you are not a current member,and this copy is being furnished through the generosity of the RAE. Our club relies on all it's members for it's survival as well as for the financial ability to publish QUA-RAE and support the many worthwhile club functions. Dues are only $15.00 for a full membership.
Send your dues to: The RAE.PO BOX 844,Erie,Pa 16512

THE QUA-RAE Jan,1989

The QuaRAE lives again! We repeat: This is your last issue unless your dues are paid. It will be bigger and better with your help. Pitch in: Contribute an article -- any subject.

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The R.A.E. Inc.
P.O. Box 844
Erie, PA 16512

CLUB OFFICERS

PRESIDENT	Chris Robson	KB3A
V.PRESIDENT	Don Kelly	KA3QDM
SECRETARY	Clark Coho	N3DYY
TREASURER	Matt Rizzo	KA3PEJ

BOARD OF DIRECTORS

Bob Schwimmer	N3FAW	Ch'm'n
Joe Pearo	WB2ICS	
Chester Kanis	KB3P	
Jim Ferguson	KZ3C	
Kevin McKenna	WB3KKT	
Richard Waldinger	NI3Q	
Mark Bronson	KD2HG	

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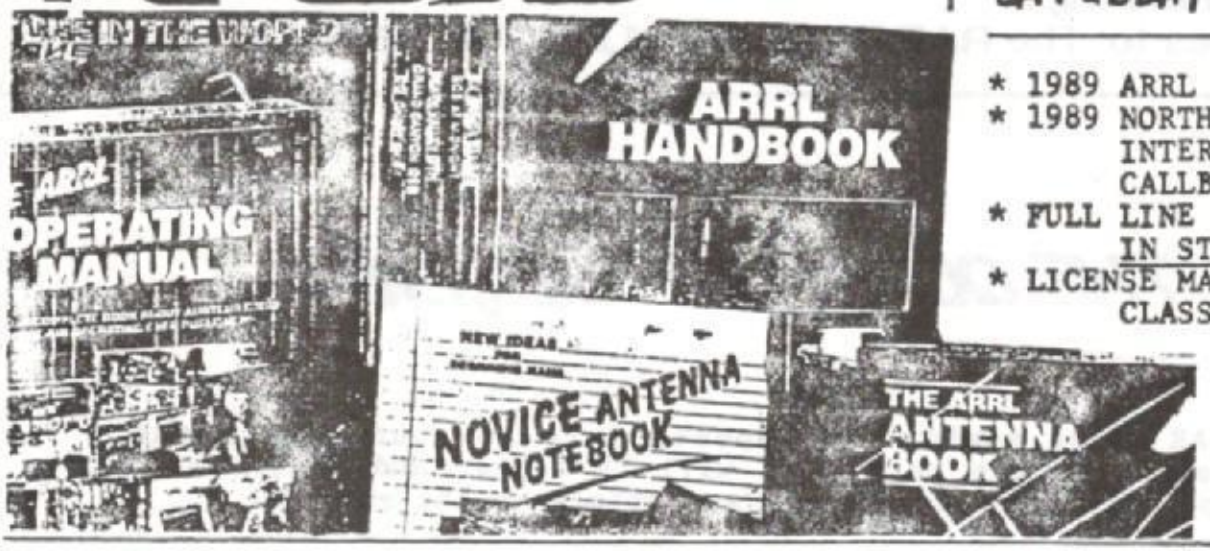

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THE PREZ SEZ

In this new year we are being challenged from the very beginning to bring the Radio Association of Erie to a higher level of involvement and commitment to our membership and the community in which we live. This might sound like an ad from the Red Cross or maybe a speech from a political candidate, but the fact remains, we must show our worth or we might as well fold up the club.

The first step to making our club a quote "FIRST RATE" organization is INVOLVEMENT. I have been involved with the Radio Association of Erie for 10 years now, not just being a member, but being an active particapant in club activities and club business. There have been many times I have found myself getting frustrated by the additude of some of the members, all talk and no action. Or maybe the fear of doing the wrong thing stops many members from beng involved. Hey, everyone makes misstakes, but we should be more supportive of the people making an effort instead of running them into the ground. Any amount of involvement is a success for the club because something is happening, and we all know the ladder to a successful club starts with the first step, so make something happen, lift your foot to the first step, get INVOLVED!

The second step to making our club "FIRST RATE" is commitment. By definition, COMMITMENT means a pledge to do something in the future; the state of being obligated. I have noticed that the R.A.E. membership lacks commitment since very few tasks are ever followed through with. This problem isn't from the lack of trying on our members part, but when membership support is not there, commitment is very hard to keep. When was the last time you told one of the members of one of the club committees they are doing a good job or offer to help in some small way. The members involved in the present committees are doing a very good job even if they are not aways appreciated for their activity. I also have found the most cynical members are the most disposable members, they normally have no constructive answers to the problems and quite honestly are the poison to the creative process. We want to encourage every member to commit to at least ONE committee and this will bring fresh ideas and possibly help you find your nich in the club.

The third step in the success of the R.A.E is FUN. Lets bring fun back into the club. It is the love of the hobby that brings us together, sharing our varied fasinations for the hobby can be fun. I know this is true from first hand experience. Back in 1980, I had a desire to enter the PA.QSO Party, so with the help of KD3D, we set out for Mc Kean County and operated. I think we got 6,000 points but we had such a great time. My enthusiasm for this event spead throughout the club and now the R.A.E has 3 club titles to our name, WE HAD FUN! There are alot of operating activities the club can particate in and alot of small projects to do, so lets do it, lets have some fun!!!

Now you know what I expect from the members of the Radio Association of Erie, lets set out to do it, lets make a quality organization we all can be proud of, get INVOLVED and make the COMMITMENT to be "FIRST RATE"!

-- 73, Chris

RAE BUSINESS MEETING JAN 5 1989
RED CROSS BLDG PITTSBURGH AVE ERIE, PA

	DIRECTORS	OFFICERS	MEMBERS
PRESENT:	Mark Bronson KD2HG	Chris Robson KB3A	23 total per signup sheet
	Chester Kanis KB3P	Don Kelly KA3QDM	
	Kevin McKenna WB3KKT	Clark Coho N3DYY	VISITORS
	Richard Wadlinger NI3Q	Matt Rizzo KA3PEJ	Mike Sulkowski KA2GYY

ABSENT: Jim Ferguson KZ3C
Joe Pearo WB2ICS
Bob Schwimmer N3FAW

President Chris Robson opened the meeting at 7:30PM with holiday greetings and best wishes for successful amateur radio activity for the coming year. He then called for committee reports.

Qua Rae: A temporary committee - Kevin McKenna, Jim Spinks KJ3L and Dick Blasco KY3D - were asked to produce the next edition.

Treasurer's Report: prepared by 1988 Treasurer Bob Schwimmer and presented by 1989 Treasurer Matt Rizzo. Details are included as part of these written minutes. To summarize for the year 1988: Income $18858 Expenses $17472 Net Income $1386
A motion was made and carried to reimburse Jim Spinks $52.10 for postage incurred thru 12/20/88. rOf recent interest, net income from the Christmas Party Raffle was $337. Aside from the raffle, the party itself incurred a loss of $41.

Chairman of the Board: An organizational meeting of the board was held Jan 2 with all seven board members present. At this time Bob Schwimmer was elected Chairman. Many items concerning budget, membership, organization and program planning were discussed. (this was reported by Kevin McKenna in Schwimmers absence)

Membership: Jim Spinks reported 99 members with paid up dues at the present time.

Public Service: It was reported that Barb Crotty has accepted this assignment. This is to be confirmed as she was not present at the meeting.

Education: There is no chairman or committee at this time.

Contest: Tom Schmitz KA3CRC gladly accepted the appointment.

Interference: Bill Klem WB3AAB will continue to handle this committee.

Repeater: Tony Zona WB3KGT presented an update of the progress in the 61 rebuild. We hope to be in operation in several weeks. This depends on the progress in rebuilding the controller. Work on rebuilding the duplexer cavities, which were damaged by lightning, is proceeding satisfactorily and it appears that this $1900 item will be salvaged for the 82 repeater. Tony also emphasized the need for equipment storage. Joe Ciano K3IVG and Don Kelly KA3QDM will recommend at the next meeting the type and cost of an enclosure around available storage space in the Red Cross garage.

Norma Vanderhoff W3CG reported YE Committee active; monthly testing continues as usual.

Meeting adjourned at 8:30PM

Clark Coho
Secretary

cc Robson
McKenna
Schwimmer

61 REPEATER NEWS BULLETIN

When will 61 get back on the air?

How often during the past few months have you heard that question? Well it has progessed to the point where it appears we can see the proverbial light at the end of the tunnel. Fred Weiser KA3AWR, who is Vice Chairman of the Repeater Committee, has carried out the system design to the point where he needs hardware assembly help. Fred together with Joe Pearo WB2ICS, Equipment & Maintenance Chairman, have reviewed the project and have detailed the various tasks remaining. At the Repeater Committee meeting on Jan 17 the work was reviewed and assigned to various committee menbers as follows:

Job #1 Assigned to Bill Klem WB3AAB
Build a small Telephone Line Distribution & Lightning Protection Box. It will house 3 modular phone jacks and a gas discharge tube within a fully shielded metal box. 1 modular cord & plug also to be furnished.

Job #2 Assigned to Joe Pearo and Fred Weiser
Build a rack mount chassis (short) to be installed in the Micor cabinet. Will include several RCA phone jacks and will house the interface logic & buffers for the RC850 - Micor link. Must be fully shielded.

Job #3 Assigned to Geo. Bablak W3ZQS with Fred Weiser
Build a rack mounted chassis to hold a packet TNC and a telephone modem. Front panels must be visible.

Job #4 Assigned to Bill Klem
Build the Battery Backup Pack and install in an appropriate weather proof outdoor enclosure.

Job #5 - Assigned to Tony Zona WB3KGT with Joe Ciano K3IVG
Obtain an appropriate Micor wall mount bracket and install at WQLN.

Job #6 - Assigned to Craig Hill K3PLV
Recondition ICOM 22U link transmitter as required. (Inspection completed)

In addition to the above hardware tasks, it will be necessary to define Operational Policy and make Rules of Control of the repeater. A task force was formed consisting of:
Mark Bronson KD2HG, Chairman of the Repeater Committee an Policy and Rules
Dave Henderson N3EDY
Chester Kanis KB3P
Bill Klem

As is quite evident, there is still much work to be done. However, it was felt by the committee that it could be completed within 6 weeks since the jobs will be moving in parallel and we accept this as a challenging goal. On occasion, we may be calling for help by club members with expertise in particular areas and we hope you can assist.

OUR GOAL:

61 OPERATIONAL BY FEB 28

Clark Coho N3DYY

EDITOR'S EXTRAS

The Feb. general meeting of the RAE will be held Thursday 2/2/89 at 7:30pm in the Red Cross Bldg.-Bring a friend.

The Lake Erie Emergency Net on 146.82 at 6:30pm Sunday eves is alive and kicking-just ask Scotty,W3STK our NCO. Check-ins are always welcome.

Dues are due. The 1989 dues are $15 for full membership. That's $1.25 per month,or a donut and cup of coffee per month. Tell you what..Pay your dues and demand we have coffee and donuts at meetings,then your dues end up being free. Or,pay the dues,skip the donuts and take a couple pounds off the middle. Either way, **YOU WIN** and it doesn't really cost you anything. Plus you get two or three super banquets (CHEAP), Field Day (FREE) and free use of club equipment. Besides,I'd like to use the space in **YOUR** QUA-RAE for SWAP SHOP,COMING EVENTS,TECH NOTES, CONTEST CORNER,etc...rather than "dues news". So lets get crackin' and mail your dues in NOW... After-all,YOU and I have a lot to do this year. Let's board the **Niagara** again this year. Let's send **Mothers day** greetings around the world from Millcreek Mall again. Let's show the world that the R.A.E. is a force to be reckoned with this **Field Day** - We ranked around 28th in our class last year--and we hardly even broke a sweat. Let's squash those clowns across the state who think they can keep **OUR** club trophy for the **PA QSO PARTY.** this Fall. How 'bout a hamfest? The R.A.E. has put on some nice 'fests over the years. Does any of this sound good to you? If you'd like info on any of these activities just call kB3A or myself. There's absolutely no obligation on your part to participate but we'd like to hear your comments.

-73,

Kevin,WB3KKT
Editor, QUA-RA-RA-RAE

Opinions expressed are my own and don't necessarily have any bearing on anything in particular or at large.--KMc

COMMENTS FROM THE CHAIRMAN --

THE NEW YEAR BRINGS MANY OPPORTUNITIES FOR OUR AMATEUR RADIO COMMUNITY IN ERIE COUNTY. I EXPECT THE RAE WILL PLAY AN IMPORTANT ROLE. WE HAVE NEW OFFICERS WHO INTEND TO PROVIDE NECESSARY LEADERSHIP TO ACCOMPLISH MANY THINGS, BUT NOT WITHOUT HELP FROM THE MEMBERSHIP.

I COULD GO ON HERE ABOUT THE THINGS THAT NEED DOING, BUT I'D PREFER TO CONCENTRATE ON THE TWO MOST IMPORTANT ONES, AS I SEE IT: EDUCATION AND PUBLIC SERVICE. BOTH COME FIRST.

EDUCATION IS A FORM OF PUBLIC SERVICE, BUT IT IS ALSO SELF-SERVING FOR THE AMATEUR RADIO SERVICE. WE WON'T HAVE NEW PEOPLE UNLESS WE STIMULATE MANY MORE PEOPLE TO GO FOR THEIR LICENSES AND UPGRADING. CLASSES NEED TO BE HELD, THERE MUST BE PEOPLE WHO ARE WILLING TO ORGANIZE AND OPERATE THEM. WHEN I ATTENDED MY FIRST CLASS (NOT THAT LONG AGO!) I WAS IMPRESSED BY THE PEOPLE WHO GAVE OF THEIR TIME AND ENERGY TO HELP ME. I KNOW WE ALL ENJOYED THE EXPERIENCE. IT'S IMPORTANT TO REMEMBER THAT WITHOUT MORE AMATEURS TO CARRY ON WE WILL LOSE THE PRIVILEGES THAT WE ENJOY ON THE AIR.

IT WON'T HAPPEN UNLESS CHRIS KB3A, OUR PREZ, CAN FIND A SPARKPLUG TO ORGANIZE CLASSES AND TEACHERS. PLENTY OF US CAN TEACH, AND IT IS FUN TO HELP OTHERS LEARN. AND WE LEARN WHILE THEY LEARN! STEP FORWARD, IT IS SATISFYING.

TOO MANY OF US LOOK DOWN OUR NOSES AT THE EAGER NEW HAMS, NOT REMEMBERING THERE WE WERE YEARS AGO. SO WE NEED TO NOURISH, COUNSEL AND ENCOURAGE NEW PEOPLE TO MOTIVATE THEM FOR A LIFETIME OF FUN AND SERVICE TO THE AMATEUR RADIO RANKS. WE NEED TO MAKE THEM FEEL WELCOME AND HELP THEM TO MATURE IN THE HOBBY. OUR LIVES WILL BE ENRICHED AS A BY-PRODUCT.

PUBLIC SERVICE IS ESSENTIAL TO OUR CLUB. WITHOUT IT WE ARE JUST ANOTHER SELF INTERESTED GROUP. WITH IT WE HELP MULTITUDES OF PEOPLE AND GIVE SOMETHING BACK FOR OUR PRIVILEGE OF USING THE AIR WAVES. REMEMBER (?) WHEN YOU STUDIED (?) THE FCC REGS AND IT SAID IN PART 97.1 OF THE CODE "TO PROVIDE EMERGENCY OR PUBLIC SERVICE COMMUNICATIONS (ETC)". CONGRESS HAS RECENTLY RECOGNIZED AND REINFORCED THE ATTITUDE OF THE FEDERAL GOVERNMENT REGARDING THE AMATEUR RADIO SERVICE. SENATE BILL S.1048 OF 1988 STATES "THE CONGRESS RECOGNIZES THE DISTINGUISHED SERVICE OF OUR NATION'S AMATEUR RADIO OPERATORS IN PROVIDING EMERGENCY SERVICE."

WE WORK AT THE EVENTS NOT JUST TO REPORT ROUTINE HAPPENINGS, WE'RE THERE TO BE AVAILABLE IN CASE OF ACCIDENTS AND INJURIES. I'VE SEEN LETTERS OF APPRECIATION AND HAVE BEEN PRESENT WHEN GROUPS WE HAVE HELPED COULD NOT THANK US ENOUGH.

THESE EVENTS AND SKYWARN MAY TIE UP A REPEATER, BUT THEIR USE IS ESSENTIAL TO AN ESSENTIAL ACTIVITY. LET'S HELP CHRIS AND OUR PUBLIC SERVICE AND SKYWARN COORDINATORS BY VOLUNTEERING!

FUTURE MEMBERSHIP MEETINGS WILL BE GEARED TO PROVIDING MATTERS OF INTEREST TO THE GROUP. THE BOARD OF DIRECTORS WILL ACT UPON MATTERS OF BUSINESS WHICH NEED NOT TAKE UP VALUABLE TIME IN MEMBERSHIP MEETINGS. THE BOARD IS AUTHORIZED TO CONDUCT NORMAL BUSINESS AND APPROVE EXPENDITURES SUGGESTED BY MEMBERS.

THERE WILL BE OPPORTUNITIES AT THE GENERAL MEETINGS FOR MEMBERS TO MAKE SUCH SUGGESTIONS. MEMBERS ARE INVITED TO ATTEND BOARD MEETINGS. OFFICERS SHOULD ATTEND BOARD MEETINGS.

WITH THESE CONCEPTS IN MIND, AND MANY MORE TOO LENGTHY TO STATE HERE, WORKING TOGETHER WE CAN BUILD A BETTER RAE IN 1989. HELP! BRING GUESTS TO MEETINGS AND PROPOSE NEW MEMBERS. PAY YOUR DUES IF YOU HAVEN'T ALREADY DONE SO. GIVE OFFICERS AND BOARD MEMBERS YOUR SUGGESTIONS FOR CHANGES YOU'D LIKE TO SEE!

73 ... BOB, N3FAW

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QUA-RAE,2-89

Kevin McKenna,WB3KKT - Editor

QST QST QST...The March 2nd meeting of the RAE will be held at the Erie County Vo-Tech School, 8200 Oliver Rd. Bob, K3SBU will head a team hosting the RAE for our special meeting and program. Group tours and discussion will be featured. Feel free to bring guests, but we need to know how many people will attend as refreshments and tours need to be planned. Please call Don, KA3QDM1 at 455-1191 or Bob, N3FAW at 866-3027 by **Wednesday March 1** if planning to attend. To reach the school; proceed South on Rt19 (Peach St) to the first East/West Rd South of I-90 (Oliver Rd),turn West and drive about a mile to the school. Park in the rear. The meeting will be in the library. See you there.

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Jim Ferguson	KZ3C	
Kevin McKenna	WB3KKT	
Richard Waldinger	NI3Q	
Mark Bronson	KD2HG	

Robert Schwimmer N3FAW
129 East Arlington Rd.
Erie PA 16509
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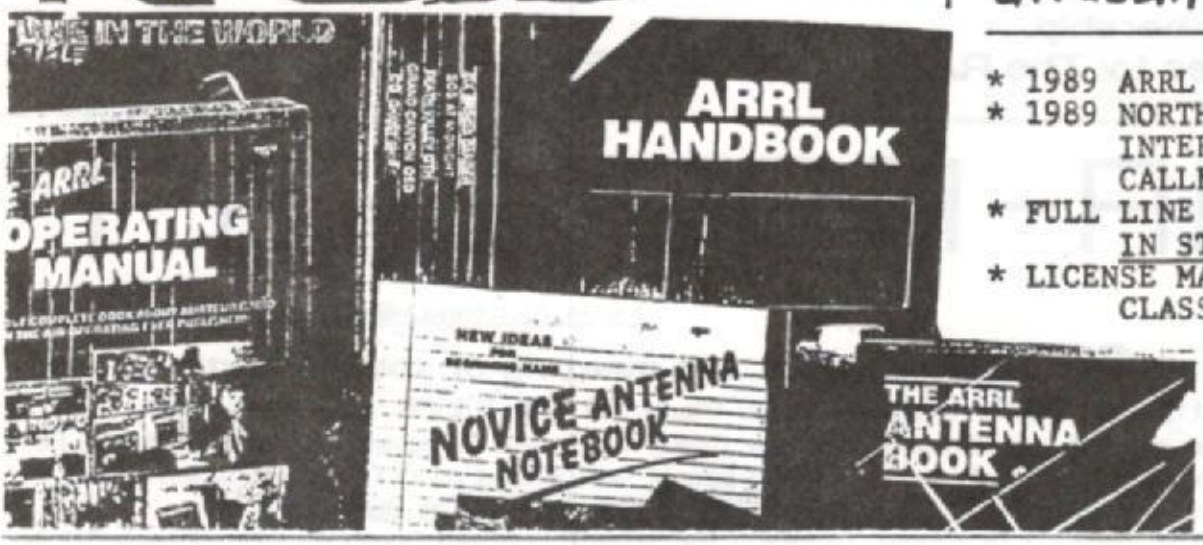

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2/89 P3

The Different Types of Hams One Meets on the Air

by Tom Brown KC4NC
from The DX Magizine

Extra:
Knows all band openings,both short and long paths.
Uses a monobander on favorite band
Has at least one amplifier capable of producing the legal limit
Keeps a list of beam headings and country prefixes near the operating position
Has worked most countries on most bands

Advanced:
Knows when bands are open but forgets to check long path
Uses a very good tribander
Is able to build a homebrew linear
Knows where to find headings and prefixes
Has worked many countries on more than one band.

General:
Is aware of local sunrise and sunset times
Would like to get his tribander up a few more feet
Has been meaning to buy an amplifier
Uses 2 meters to ask about headings and prefixes
Gets involved in ragchews and forgets to rejoin HF

Technician:
Is able to recognize a DX Edge two out of three times
Uses an inverted Vee
Yells into microphone
Doesn't care about beam headings
Has worked all neighborhood TV sets

Novice:
Assumes 10 meters is dead when he hears nothing
Forgets to attach coax to radio
Can't really use an amplifier
Doesn't know what a beam heading is
Forgets to QSL

Big Gun DXer (any class):
Makes own band openings
Uses stacked monobanders
Has a linear capable of melting down all front-ends within 500 miles
Knows all headings and prefixes by heart
Needs QSL information on God
(from the DX Magazine)

NOTICE: The club has about 200 or more feet of 7/8" solid core coax cable which may possibly be put up for bid. If you know anyone interested in bidding please contact Tony WB3KGT 864-4545; or Joe WB2ICS 774-3976; or Bob N3FAW 866-3027.

HAMFEST CHECKLIST

It's always a good idea to have a list of what you think you may want to pick up at a hamfest. Also, there are certain things you just can't do without when attending a hamfest - especially the big ones. Many of these items are very common-sense type things. Consider:

WEATHER - Warren is normally on a scorching hot day. Meadville always had rain. Dayton has hit us with heat,snow,rain and hail. (tough to call).

The Trip - You'll obviously need to pack a few more things for a three day hamfest 275 miles away than for a six hour swap-meet in 25 miles away. Proper attire (see weather) , 2 meter rig for check-ins and directions, snacks, coffee, etc.

ITINERARY - FCC Exams, forums, eyeball QSOs, etc.

Flea Market - Are you gonna BUY or Buy and Sell? A buyer should take a list, cool,hard cash and plenty of those neat bags with handles that the equipment manufacturers hand out.

A seller should take a table,chairs,price tags, suitable shelter(if not provided) and of course, whatever you think you can sell and a truck to haul it in. This is in addition to what the buyer would take.(see above).

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Also, don't forget the car keys and your callsign badge...look on the dresser where you put it last Fall..

==========

Your articles are welcome,,MORE than welcome. Send them to the P.O. Box or to me at 1225 E. Arlington Rd, Erie,PA 16504 2707. Or send leave word for me on packet on 145.01 and I'll get in touch with you. We have the space in the QUA-RAE for everyone to make use of--PLease Do...

-73 Kevin,WB3KKT YOUR QUA-RAE Editor

2/89
P4

RAE BUSINESS MEETING FEB 2 1989

RED CROSS BLDG PITTSBURGH AVE ERIE, PA

	DIRECTORS	OFFICERS	ATTENDANCE
PRESENT:	Bob Schwimmer N3FAW	Chris Robson KB3A	24 total per signup sheet
	Chester Kanis KB3P	Don Kelly KA3QDM	
	Kevin McKenna WB3KKT	Clark Coho N3DYY	VISITORS
	Joe Pearo WB2ICS	Matt Rizzo KA3PEJ	C. R. Zimmerman WQLN
			Dick Smith KA3QEW
ABSENT:	Jim Ferguson KZ3C		
	Mark Bronson KD2HG		
	Richard Wadlinger NI3Q		

President Chris Robson opened the meeting at 7:30PM.

COMMITTEE REPORTS:

Treasurer Matt Rizzo: January report submitted; filed with Minutes. Summarized as follows:
Receipts $239 Disbursements $152 Net gain $87 Tot All Cash Accounts $9093

Secretary: Minutes were accepted as published in Qua Rea

Membership: Jim Spinks KJ3L reported 110 members paid up to date.

News Bulletin: Kevin McKenna will edit Qua Rae Feb issue. Input needed by Feb 15

Public Service: Barb Crotty KA3JTD has accepted Chairman position. A Boy Scout event is coming up April 8 9AM-2PM. More details in March.

Education: Chester Kanis KB3P volunteered to handle one class. Joe Seppala KC3LY and Bob Schwimmer also offered assistance. No Chairman appointed as yet

Property Custodian: Gene Rogowski KA3EZV reported that the 2 Meter rig and Robot are available for loan. He has traced the QTH of 33 items of club property out of the recorded list of 43. Repeater equipment not yet inventoried. Argosy needs repair. Joe Seppala KC3LY moved to return it to the factory. Second by Tom Schmitz KA3CRC. Passed.

Contest: Tom Schmitz KA3CRC and Jim Spinks reported the PA QSO party club trophy is missing since the Springfest last April!! Who has it?? Where is it??

Other Activities: Chris Robson discussed possible traffic activity at the Mall later this year.

Repeater: Dave Henderson N3EOYreported for Tony Zona KB3KGT. We expect 61 on the air at the end of the month. Repeater Committee will hold a meeting Wed Feb 8 at 7PM at Red Cross

OLD BUSINESS:

Equipment Storage Area: Don Kelly KA3QDM reported that the facility is 50% complete- $26.78 expense has been incurred so far; $30 required to complete. Matt Rizzo moved for approval to spend $56.58 total. Second by Joe Ciano K3IVG. Passed

NEW BUSINESS:

RAE Sunday Two Meter Emergency Net: Bob Schwimmer offered to be coordinator until a Net Manager can be appointed. Scotty Forbes W3STK will be Net Control for February

Don Kelly reported that Tom Bachler of the Red Cross would like to meet with the Chris Robson and Bob Schwimmer to discuss relations between the Red Cross and RAE.

PA QSO Party: Jim Spinks reminded the members that we promised to furnish the trophy for the 1988 QSO Party. Cost $30. Approval given.

Meeting adjourned at 8:30PM

WQLN visitors: Chris Robson presented a plaque to Mr CR Zimmerman, the Manager of WQLN as a commemorative token of thanks for the use of the tower and other facilities during past years. Mr Zimmerman expressed hope for continuing cooperation in the future.

cc Robson
McKenna
Schwimmer

Clark Coho
Secretary

2/89 - P6

COMMENTS FROM THE CHAIRMAN--

The January RAE meeting at the Red Cross Chapter house was the first of many this year in which we hope to have programs for the enjoyment of the members.

Club President, Chris, KB3A presented a plaque to WQLN President and General Manager Chris Zimmerman honoring WQLN's generosity in allowing RAE repeaters on their towers for many years. WJET was honored in the same manner at the RAE Christmas party last December.

KB3A and Vice President,Don Kelly, KA3QDM need your input as to programs you'd like to see at the meetings. Don is in charge of programs and activities. We believe programs should be amateur radio oriented.

Some examples are:

* HF SSB operating techniques
* HF CW operating techniques
* Vertical antennas
* Di-pole antennas
* Contests and Field Day
* QRP operating
* UHF Repeaters
* FCC Rules
* School programs
* etc., etc...

Obviously there are many more topics. In our club alone we have people with enough expertise in every subject to conduct programs. Why not admit you can do it and offer to conduct a program? You'll be glad you did!

The raffle last Fall was the TS-140S HF rig with power supply. It seems like a good idea to alternate between HF and UHF for raffle items. So this Spring we expect to return to the 2 meter arena and possibly offer a mobile rig, Icom or Kenwood, and one or two hand held units.

The raffles are a lot of work, but the income is necessary to support the club activities such as the Qua-Rae (postage and printing have markedly increased). The drawings also add to the excitement at the parties where the drawings are held.

Interest needs to be increased in the RAE Tri-State Emergency Net at 6:30 each Sunday night. The primary purpose behind this long-standing net is to maintain o ready availability of amateurs in the 2 meter band for some possible future need in time of emergency. Other matters of general interest can also be discussed. As Net Manager I will appreciate any members who would willingly act as net control for one or more Sunday evenings. Also, I will never embarrass anyone on the air by asking them to act as net control, so don't let that worry you and keep you from checking in.

Come to the next meeting and bring a friend!

--73, Bob N3FAW

PUBLIC SERVICE

Boy Scouts of America walkathon:;

To be held April 8, 1989 at Presque Isle from 9:00 am til 2:00 pm. Call Barb,KA3JTD (Public Service Coordinator) if you'd like to help. -- (this is a good practice run for the bigger races and for REAL emergencey traffic handling,,,Ed)

THE PREZ SAYS

Well, we made it through another business meeting and so far we have been able to keep the meetings to a very reasonable length. But only the members who show up to the meetings have appreciated the short business meetings which leaves us more time to socialize. Let's see a better turnout so we can get a better idea of what direction you want the leadership to steer the ship.

As some of our members know by now the R.A.E. didn't win the PA QSO Party this past year. It comes as no suprise because the scores that the members sent in were only a fraction of what they could have been. I feel we should try to do better next year, we might not win, but we should be respectable.

We are planning some really fun events in the near future which all members have enjoyed through the years. First, we are making plans for the Springfest which is always a good social event. We would like to see some new faces in the planning committee for the Sprigfest who could help in the organizing of this event. It's not hard because people like N3FAW have "been down the road" in these events and would gladly give you any advice needed to make this event fly. Secondly, we are planning an operating event at the mall, in which we will be demonstrating our hobby and sending "Mother's Day" messages. Third on our list is Field Day. It's not too early to start planning for this yearly event and I would like to see more members participating this year. Some people have said that the contesters won't let anyone operate. Well, I feel that is just some people's way of getting out of taking part because I know I would love to let anyone "go to it" and my keyer will work no matter who is in front of it!

Finally, I have one request which is not too hard for anyone, and that is .. OPERATE! Put your rig in the transmit mode. It doesn't matter which mode of operating you like, GET ON THE AIR!, BE ACTIVE HAMS and let's put the Radio Association of Erie on the map again for having active operators instead of being "living silent keys"!

OPERATE!!

Chris KB3A

FOR SALE

Amp supply AT1200 antenna tuner (like new) with built-in SWR meter and 3 position antenna switch, Mini Products Mini-quad antenna in very good condition--$ 200.00 for both. Drake WH7 SWR meter--$ 25.00. Heath cantenna dummy load --$ 10.00. Call Ray,KC3WF at 868-4093.

Collins 75A-4 receiver, Collins KWS1 transmitter. If interested please call Ken Teleis K23E. 871-7778 or 456-3142

Have an item to sell? Looking for that hard-to-find piece of gear? Let your QUA-RAE help. Call Kevin,WB3KKT at 825-5919 or place your ad via packet radio. Connect to WB3KKT and place your ad when asked to leave message. No business related traffic please!

2/89 PS

RAE Board of Directors Meeting 1/24/89

The meeting was called to order at 7:25pm by N3FAW.

First on the agenda was a report by Don, KA3QDM on the enclosure at the Red Cross Building. The motion by KA3QDM with second by WB2ICS that an enclosure consisting of a wooden frame covered by wire mesh be built with a cost ceiling of $120.00 for storage of club equipment --- Passed.

The minutes of board meetings shall be printed in Qwa-Rae.

A motion by KZ3C, seconded by KD2HG that excess club equipment to be sold shall be put up for bid if value exceeds $25.00 -- Passed.

A motion that monies taken in from the sale of excess repeater equipment shall remain with the repeater group since the funds were granted them to begin with. Motion by WB2ICS, second by NI3Q --Passed.

Discussion followed as to whether or not the RAE needs two 2m repeaters and whether we should keep them both as "open repeaters". With the new antenna systems and band openings, we may have to consider PL or some other action--Up to repeater committee.

Springfest??, Where??, When??, Prizes?.. to be brought up at regular business meeting. Also a message handling station at the Millcreek Mall for Mother's Day greetings - to be followed up on by WB2ICS.

Minutes of Board meetings to be handed out at meetings to keep members informed--on trial basis.

Most regular club business can be carried out at the Board meetings rather than tying up the regular meetings. All members are welcome to attend Board meetings. This should help to shorten the regular meetings and leave more time for post-meeting activities.

In attendance were; KB3P, NI3Q, WB3KKT, N3FAW, WB2ICS, KZ3C, KD2HG, and guests were KA3QDM, N3DYY and KB3A.

Meeting adjourned at 8:35pm.

submitted by
Kevin McKenna, WB3KKT

COMING EVENTS

Conneaut Hamfest: Sunday, March 12, 1989 8:00am to 3:00pm. At the Human Resource Center 327 Mill St, Conneaut, OH. Food, Prizes, and FCC Exams given by our VE team.
Admission is $3 door or $2 advance.
Talk-in on 147.39+...See you there.

Madison Hamfest: One or weeks after Conneaut (haven't seen advertized in the magazines). Will get the information on the Sunday nets when I receive it....Listen to the repeaters for updates.

Dayton Hamvention: April 28,29,30 at the Hara arena. If you haven't made room reservations..you'd better hurry or you'll be staying 100 miles out. More on this one later.

RAE REPEATER COMMITTEE MEETING
FEB 8 1989 RED CROSS BLDG
PITTSBURGH AVE ERIE PA

Present:

Members

Fred Weiser	KA3AWR	Bob Schwimmer	N3FAW
Joe Pearo	WB2ICS	Tony Zona	WB2KGT
Clark Coho	N3DYY		

Visitors - none

Chairman Zona opened the meeting at 7PM to review the status of the 61 repeater project. There will be 4 sub-components to be installed:

- ACC RC 850 controller
- Intermediate box
- Micor repeater
- Duplexer

There was considerable discussion on the mounting arrangement - whether to have them individually installed on the walls or mount everything in a rack. More questions have to be answered before it is resolved.

It appears that the intermediate box (Job #2 in last Qwa Rae) will be the limiting item since it will contain the circuitry for many interface and logic functions. This "wish list" of functions is getting long. Provision is to be made for control of:

- Micor metering points
- Micor audio
- temperature outside
- temperature inside
- PL encode and decode
- frequency
- deviation
- % quieting
- battery backup
- wind direction and velocity

We must prepare specs, design circuits, prepare material lists, procure parts and build the circuits for each of these functions.

This work may preclude meeting our goal of 61 on the air by the end of the month. The subject of a short out using the "Meadville board" was discussed which would enable us to meet the goal - BUT there would be no "wish list" to speak of.

As to the RC850, programmers are getting busy.

At the moment we are still planning on doing the job right with all bells and whistles, and still going to try to be operational by Feb 28. (Wish it was leap year - every day counts)

Clark Coho Sec'y Rptr Comm

cc McKenna
Robson
Schwimmer
Zona

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QUA-RAE, 3-89

Kevin McKenna,WB3KKT - Editor

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SECRETARY	Clark Coho	N3DYY
TREASURER	Matt Rizzo	KA3PEJ

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Joe Pearo	WB2ICS	
Chester Kanis	KB3P	
Jim Ferguson	KZ3C	
Kevin McKenna	WB3KKT	
Richard Waldinger	NI3Q	
Mark Bronson	KD2HG	

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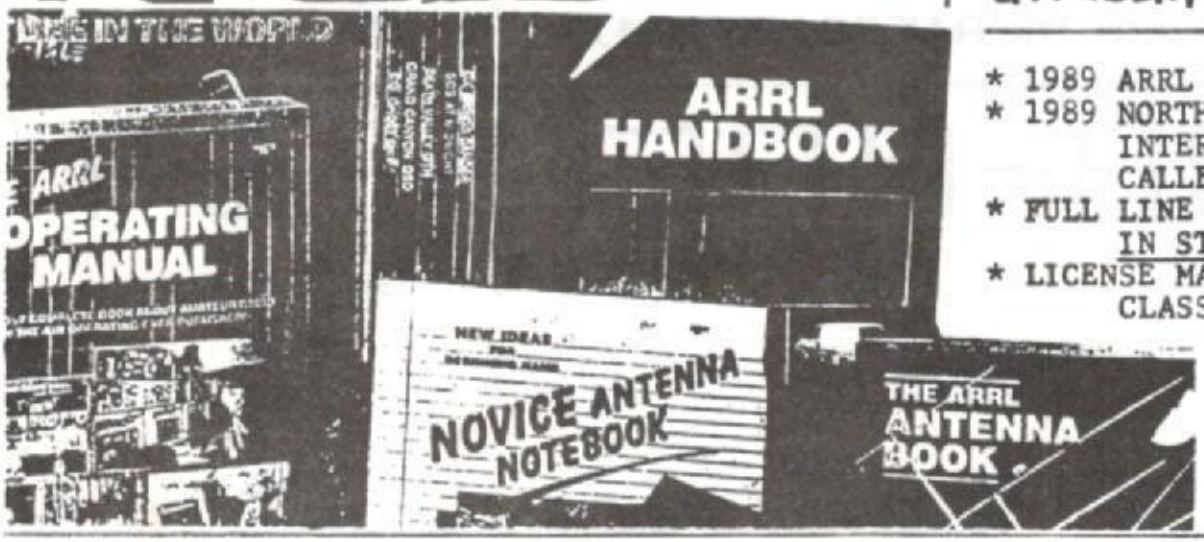

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RAE Business Meeting 3/2/1989
Erie County Vo-Tech

The meeting was called to order at 7:40pm by Don,KA3QDM - Vice President. Roll call of Officers and Directors showed KA3QDM, N3FAW, KB3P, WB3KKT, NI3Q as present. There were 14 members present.

Committee Reports:

Public Service, Don,KA3QDM - Boy Scouts Walk a thon April 8 at 9:00am on the Peninsula.

Property, Gene,KA3EZV - Storage room at the Red Cross is complete. The Argosy is being repaired by Ten-Tec and should be back in a couple weeks.

Repeater, Bob,N3FAW - The controller is still being improved upon. Should be on the air by the end of March.

Old Business:

N3FAW and KB3A to meet with Tom Bochler to discuss our present and future arraingements with the Red Cross. To report at the April meeting.

WB2ICS will hopefully have something to report concerning the special event station at the Millcreek mall at the next meeting.

KA3QDM to talk to Chris Zimmerman at WQLN about our club providing volunteers for their upcoming auction. To report at the April meeting.

New Business:

Springfest will be held on April 22nd at the Sunflower club. More details at the April meeting.

Field Day meeting to follow the April or May meeting to plan,prepare etc...

Meeting adjourned at 8:02pm.

Kevin T McKenna,WB3KKT
acting secretary

The meeting was followed by a very informative and enjoyable tour of OUR Erie County Vo-Tech School. After the tour we were treated to homemade cookies and coffee and then - everyone got at-least one door-prize.

Many thanks to Bob,K3SBU, Hildi,KA3EZT, and Len,KA3EZL for their gracious hospitality. A very enjoyable evening was had by all.

Kevin, WB3KKT

THE March meeting at the Vo-Tech School was very worth while. Bob K3SBU, Len KA3EZL and Hildegard KA3EZT were our hosts for the school. They did a fine job and gave unselfishly of their time. Unfortunately not many members availed themselves of the opportunity. Of course, the weather could have been more cooperative. ♦♦ IF all goes well the next meeting will also be interesting -- discussion of coming radio events will be held... Possible Mother's Day and also Field Day plans are on the agenda. ♦♦ MANY members still contrbute unselfishly of their time and effort for the good of our club. Their hard work is appreciated and with constructive team effort we can make the RAE one of which we can be proud. ♦♦ PROGRAMS of interest to amateurs are wanted for meetings. Come forth with your ideas: advise Chris KB3A and Don KA3QDM. ♦♦ I KNOW that the work on the 61 repeater has been very time consuming. It will be coming to fruition very soon now. We have all missed the auto patch and other features, but with the good work being done: "Quality will be remembered long after other things are forgotten." ♦♦ IT'S nice to know that a new RAE directory is also in the works... ♦♦ IF you went to the Red Cross for the last meeting and were disappointed, we're sorry. We did announce it in the Sunday newspaper and in the QuaRae and on the air. But future meetings will be back at the Red Cross. ♦♦ SPEAKING of the RC, we want to express our appreciation to Lee Cabana and Tom Bachler for their courtesy and cooperation in allowing us the almost unlimited use of their fine facility! ♦♦ The Ham shack at the Red Cross is functional including a packet station, 2 meter phone and HF. It is to be improved, especially in the antenna areas, but can be used now. Tom Bachler often mentions that he would like to have our members utilize the gear. Just go in and see Tom; use your own call on the air. ♦♦ THE SPEAKER at the SPRINGFEST dinner will be Professor David Kozak of GANNON University. The subject will be the political scene in Washington -- he will top off a great evening with much interest and some laughs. Don't miss it! COME TO THE NEXT MEETING AND BRING A FRIEND! CU there -- 73, Bob N3FAW.

APRIL 89 3/89 - Pg 4

RAE BOARD of DIRECTORS MEETING 2/21/89

Present were;N3FAW, WB2ICS, KB3P, WB3KKT, KD2HG, NI3Q. Guests were; KB3A, WB3KGT.

The meeting was called to order at 7:20pm. Discussion concerning some 200 feet of 7/8" coax belonging to the RAE -- does the club need it? What's it worth?,,,Repeater committee to make reccommendation. Springfest raffle prizes to be an IC-228A and two Kenwood TH205 HT's or cash awards of $300, $200 and $200 respectively.Tickets are $1 each or six for $5 and will be sold at the Conneaut and Madison hamfests. Springfest will be on April 22nd at 6:30pm at the Sunflower club. Motion by KB3P with second by NI3Q that prizes and ticket prices listed above be approved was passed orally.We'll be selling the magnetic signs at the hamfests also.

KB3A to contact Chris Zimmerman at WQLN concerning our helping answer phones during their fund drive.

Field Day program to follow the April meeting. Number of stations, power, location, etc. will be covered.NI3Q to check various sources for generators.

Special traffic handling station at the Millcreek Mall to be followed up by WB2ICS.

Discussion followed on how we might get the maximum return on the life membership fund.--Not to spend it,but to get the most out of it. A report from the trustees on current performance and other options for our investments to be given at the next meeting.

Meeting closed at 9:06pm.

Kevin T McKenna,WB3KKT secretary.

==========

Board of Directors Meeting 3/21/89

Present were; N3FAW, WB3KKT, KB3P, NI3Q, KD2HG. Guests; KB3A.

KB3A needs at least five volunteers to answer phones on April 15 from 8:30pm till 12 midnite at WQLN.

N3FAW to arrange for a program on meteorology to follow the May business meeting.

Dave Kozak to speak on humorous political issues at the Springfest.

Motion by NI3Q with second by KB3P that the RAE purchase the Springfest prizes and dispose of them via sealed bid sent to the P.O.Box in the event of one or more of the main prizes being won by non-amateurs Passed. (non-hams get cash prizes).

KB3P to take the old Sears generator to get a repair estimate,maybe to Skinner electric.

Motion to make a packet station out of the donated C-64, printer, and the Kenwood 2m rig for members' use with cost not to excced $70.00 passed.(motion by KB3P,WB3KKT)

Motion by NI3Q,KB3P that the RAE buy the 42 magnetic signs from K3IVG to sell at hamfests Passed. Meeting closed 8:40pm

Kevin T McKenna,WB3KKT Secretary

PUBLIC SERVICE

Boy Scouts walkathon to be held April 8 at 9:00am on Presque Isle. We need at least six operators. To help or for more information call Barb,KA3JTD or Chris,KB3A.

Upcoming Hamfests

Madison, Ohio on Sunday April 2nd at Madison High School.FCC exams, refreshments, etc.

Dayton, Ohio April 28,29,30 at Hara Arena. Biggest and Bestest Hamvention in the world.

NOTICE

THE 61 REPEATER

ON THE AIR !

April 1

REPEATER COMMITTEE

George Bobiak W3ZQS	Bill Klem WB3AAB
Dick Blasco KY3D	John O'Hern KA3QWI
Mark Bronson KD2HG	Joe Pearo WB2ICS
Joe Ciano K3IYG	Bob Schwimmer N3FAW
Clark Coho N3DYY	Ken Teleis KZ3E
Dave Henderson N3EOY	Fred Weiser KA3AWR
Craig Hill K3PLY	Tony Zone WB3KGT, Chmn
Chester Kanis KB3P	

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THE QUA-RAE APRIL 1989

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++                    ANNUAL SPRINGFEST DINNER                        ++
++                    SATURDAY APRIL 22, 1989                         ++
++                SUNFLOWER CLUB, 340 METZ AVENUE                     ++
++          RESERVATIONS $7.00 EACH TO P O BOX 844, 16512              ++
++                  BY THURSDAY APRIL 20, 1989                        ++
++     (THE SUNFLOWER CLUB CAN BE REACHED BY TURNING EAST FROM         ++
++ PEACH STREET AT COUNTRY SQUIRE LIGHTING, ABOUT 3200 SOUTH)         ++
++          CALL BOB, N3FAW AT 866-3027 FOR INFORMATION               ++
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~ 4/89 - Pg 2

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Diary of a Solar Flare

4/89 - Pg 3

FOR RENT

At approximately 8:52 a.m. EST on the morning of Monday, 6 March, a fierce bloom of light erupted from the center of an exceptionally large group of sunspots just as the sun's rotation was bringing the spots into view along its eastern limb. Presumably the outburst was caused by a sudden release of magnetic energy, although no one can really claim to understand these things. But whatever the cause, it was by far the biggest solar flare since the event of 24 April 1984, during the decline of the last sunspot cycle. And it is the first really big eruption of the current cycle, which is rapidly rising toward a near-record peak sometime in 1990 or 1991. Estimates put the 6 March flare at about X-15 on the standard scale, corresponding to a total energy release of some 10^{32} ergs—or about as much energy as we humans have consumed in our entire history.

Eight minutes and 20 seconds after the initial outburst, the first pulse of x-rays and other electromagnetic radiation swept past the earth at the speed of light. Solar radiation detectors on both the Solar Maximum Mission satellite and on the GOES weather satellites were quickly overwhelmed, although all have since recovered.

Only slightly behind the first wave of radiation came the second: high-energy charged particles accelerated by the flare to just under the speed of light. Most of the particles from this particular flare seem to have bypassed us entirely, since it was essentially aiming off to the side. But in general, flare particles act like an intense swarm of cosmic rays. If and when astronauts ever venture beyond the protection of the earth's magnetic field, which deflects the particles, they will have to carry special shielding: the particle radiation from a flare as strong as this one could be lethal.

Finally, at about 1:30 p.m. EST on Wednesday, 8 March, the earth was engulfed by a flare-induced shock wave in solar wind—the steady, outgoing stream of particles and magnetic fields that the sun emits in even its calmest moments. The ensuing geomagnetic storm triggered northern lights as far south as Chicago and upstate New York. At the same time, the storm heated and expanded the upper atmosphere enough to increase the drag on the low-flying Solar Max satellite. Solar Max promptly dropped by nearly a kilometer.

Meanwhile, the 6 March flare itself had faded only a few hours after it started. But its parent sunspot group, roughly 50 times as wide as the earth, continued to bring forth lesser flares for several days thereafter.

■ M. MITCHELL WALDROP

RADIO ASSOCIATION OF ERIE
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MEMBERSHIP RENEWAL OR NEW APPLICATION

NAME..... DATE.../.../...

ADDRESS.....PHONE...-.....-.....

CITY, STATE, ZIP.....

LICENSE GRADE .....FCC CALL.....

ARRL MEMBER? (YES/NO).....SEND MEMBERSHIP FORM.....

AREAS OF AMATEUR RADIO EXPERTISE/INTEREST.....

.....

MEMBERSHIP TYPE REQUESTED..... (SEE BELOW)

AMOUNT ENCLOSED $..... (SEE BELOW FOR DUES)

NOTE: CURRENT AND PAST MEMBERS ARE ALSO ASKED TO SEND THIS QUESTIONAIRE IN FOR CLUB RECORDS

- -

MEMBERSHIP CATEGORIES

FULL MEMBER ------- 15.00 - FULL PRIVILEGES

ASSOCIATE MEMBER -- 12.50 - ALL PRIVILEGES EXCEPT VOTING

FAMILY MEMBER ----- 7.50 - IMMEDIATE FAMILY - NO QUARAE

FULL TIME STUDENT - 7.50 - FULL PRIVILEGES

NOVICE, FIRST YEAR - NO CHARGE - FULL PRIVILEGES

NEW MEMBER - 1.25 PER MONTH: BALANCE OF FIRST YEAR

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(COMPLETE MEMBERSHIP PRIVILEGES ARE SPECIFIED IN BY-LAWS)

4189- P4

RAE BUSINESS MEETING APR 6 1989 RED CROSS BLDG PITTSBURGH AVE ERIE PA

PRESENT

DIRECTORS	OFFICERS
Bob Schwimmer N3FAW	Chris Robson KB3A
Jim Ferguson KZ3C	Don Kelly KA3QDM
Chester Kanis KB3P	Clark Coho N3DYY
Joe Pearo WB2ICS	Matt Rizzo KA3PEJ
Dick Waldinger NI3Q	

ABSENT

Mark Bronson KD2HG
Kevin McKenna WB3KKT

There were 25 members attending and 1 visitor. Chris Robson opened the meeting at 7:30PM
COMMITTEE REPORTS.

Complete reports by the Board, President, Public Service Chmn and Repeater Committee are reported elsewhere in this QUA-REA. The following are excerpts from other reports and topics discussed at the meeting:

TREASURER: Matt Rizzo submitted a list of 51 members who have who have paid 1989 dues since the first of the year - total $730.50. Springfest raffle receipts to date from 46 people total $225.

PROPERTY: Eugene Rogowski KA3EZV reported that the club HF rig was repaired by TenTec - $93.68. He reported that there are 29 magnetic signs left - four more were sold at the hamfest. They will be sold to members for $8.50 per pair. Chester Kanis reported that one of our portable engine driven generators, used for power for emergencies and for field day, which had no output, has been delivered to Bob Dziubkowski K3SBU for repair

EDUCATION: Norma Vanderhoff W3CG reported that there were but three candidates at the April 1 exams. Two passed, one Novice and the other, Technician. Such small response points up a need for more education resources, particularly code. See Joe Sepala's writeup on ELMERS elsewhere in this issue.A motion was passed that the Secretary write a letter to each new Novice to offer congratulations from the club, to discuss the benefits of membership in the RAE, and to offer 1 year free membership in the c lub.

MEMBERSHIP: A new Directory is now being prepared. Please report any changes in call letters, name or addresses to Jim Spinks as soon as possible

Clark N3DYY

ELMER

At our last club meeting, president Chris (KB3A) Robson commented on the fact that we had no firm plans for educ-ation. After a few minutes of discussion, some of us suggested that an ELMER should be made available to possible interested candidates for "HAMDOM". Unfortunately, I failed to engage my brain before putting my mouth in gear and volunteered to be an ELMER. Oh well, I've been one a couple of times, why not again.

Well, what's an ELMER? I certainly don't know where the name came from but it appears to be the "moniker" we assume when we volunteer to help someone to become a licensed Radio Amateur, a HAM. The help consists of providing code practice on a regular basis and tutoring on rules and regulations as required by the FCC. It is hoped that the student can thus attain the necessary proficiency to pass the CODE (CW) and written tests so as to obtain a license of the grade he wishes to attain, be it Novice or Extra class.

And sometimes it doesn't stop there, the newly licensed ham needs equipment or the know-how as to where to obtain it. A really good ELMER will help in providing advice on equipment, antennas and other paraphenalia necessary to get it on-the-air. Finally, he or she needs that critical first on-the-air contact. You guessed it, ELMER can do that too and that's the real reward for all the time and effort put in to being a good teacher!

Why don't you volunteer to be an ELMER too?

E. Joe Sepala - KC3LV

4/89 P. 6

Comments from the Chairman --

IT IS SPRINGFEST time again! Plans are proceeding well for a fine event. It will be held at the Sunflower Club, 340 Metz Ave., at 6:30 (cash bar), 7:30 dinner on Saturday April 22. Members and their guests are invited. For $7.00 there will be a very nice buffet dinner with 3 meats, a free soft drink and dessert (cakes from the Erie County Vo-Tech School kitchen!... I know they're good).

THE SPEAKER AT THE SPRINGFEST DINNER will be Professor David Kozak of Gannon University. The subject will be the political scene in Washington He will highlight a fine evening with great interest and laughs. Don't miss his talk! After the talk there will be door prizes and the big raffle of three (3) amateur radios.

AND DON'T FORGET the raffle tickets. You do not need be present, but you'll be glad you are. Send in your raffle entries and reservations to RAE, P O Box 844, Erie, 16512. RESERVATIONS SHOULD BE RECEIVED BY THURSDAY APRIL 20; we must advise the Club by then of the number attending.

DICK WALDINGER, NI3Q, is conjuring up some good door prizes. VHF Communications will display again, Warren Radio will donate some prizes. Antenna Specialists again will donate an on-glass 2M antenna.

THE NEW REPEATER on 01/61 seems to be all that we expected. Some fine tuning and programming still are being done. Our thanks to Repeater Chairman Tony Zona, as well as Dick Bomboy, Dave Henderson, Joe Pearo, Fred Weiser, Craig Hill, George Ackerman, Ken Teleis and many others for their many hours in the project. Also thanks to Joe Ciano for obtaining the Micor at Dayton and WQLN management for the station facilities.

CU at the Springfest! 73, Bob N3FAW.

RAE PREZ SEZ

First off, I wish to apologize for my absence in the March QUA-RAE. I was very busy with business commitments and was unable to break free to write anything useful, besides if there is nothing good to say; don't say anything!

I would like to thank Lee, N3APP, for the use of his repeater during our public service event in which we used our expertise in communication for the Boy Scouts Walkathon. This event was going on when the new system on 01/61 was being installed and without his repeater we would have had a difficult time of covering this event.

Also I would like to commend the Repeater Committee for their fine job in getting 01/61 back up and running. We don't have alot of the bells and whistles on board yet, but we do have the autopatch on and other nice features which some of the members are not aware of. It seems funny, all the complaining I heard about not having autopatch capabilities and I have only heard 2 members use it!

On the social side, we have the Springfest on April 22, and a good turnout is expected. I only wish we were getting the club trophy for winning the Pennsylvania QSO Party this year, but maybe next year!! We are giving away some really good quality prizes and anyone that has attendedour social outings knows there will be a good time had by all, so don't miss it.

Also on the social calendar is Field Day. More on this in the upcoming issues of the QUA-REA.

Chris KB3A

PUBLIC SERVICE

A **BOY SCOUT WALKATHON** was held on April 8 at the Peninsula with 416 scouts participating. All went very smoothly with the use of the 147.285+ repeater. My thanks to Lee Williams N3APP for the use of this facility. Also many thanks to the volunteer operators - W3RLJ, W3TLA, W3STK, KY3D, KB3A and WB2GZM.

The **BARBER CENTER BIKE-HIKE** will be held on **Saturday April 22, 1989** from 9AM till noon on the Peninsula starting at beach 7. I will need at least 12 operators. We will meet in the 1st parking lot on the bayside at 8:30AM. To volunteer call me at **899-2470.**

73's Barb Crotty KA3JTD

4/89 - P.5

From the Repeater Committee

By Tony Zona, WB3KGT, chairman

The Radio Association of Erie's flagship repeater, 146.01/61, is a Motorola Micor broadcasting 100 watts into a Cellwave commercial antenna about 240 feet above ground, almost 1,600 feet above sea level.
The repeater replaced the 146.22/82 machine at the site, the transmitter room of WQLN TV/FM on Route 19 about a mile south of I-90.
The antenna is fed by 7/8-inch hardline, connected to a six-can wall-mounted commercial Cellwave duplexer.
The effective radiated power of the system is estimated at 450 watts.
The system is connected to the club's existing ACC 850 controller, which has a computer interface for program modifications and message editing.
Our 440 mHz control scanner will soon be replaced by the receiver section of a GE Masterpro.
The link transciever is an ICOM IC22U and is capable of talking to repeaters all over the Tri-State.
The link and control are connected by half-inch Heliax into antennas atop 20-foot masts on the roof of WQLN's studio.
One of our projects in progress is to install on the Micor the various meter readings you could get from our old 61 repeater -- S-meter, deviation and frequency.
Emergency autodial (TouchTone 9111 to get Erie police, for example) will always be in service.
Autodial (*22 call my home number, for example) will also always be operational. Your old autodial number is still there. Call us to make changes, or to get an autodial.
The regular phone patch, however, will be operational only when a control operator is on duty and has control through the 440 system. To keep the autopatch operational full-time we need control operators. The club has 440 rigs in the hands of three operators, and at least three more members will be control operators with their own rigs. More members with their own 440 rigs are needed to be control operators. Give me a call if you can help.
A Micor service contract is expect to cost less than the club has spent in the past for maintenance. A contract for parts and labor will cost $40 a month. The annual increase will be 5 percent. Even with annual compounding it will be 1994 before we reach the $50 a month the club has allowed the repeater committee for maintenance from the general fund.
I originally said that if we had secured a grant within a year of the formation of the committee last April we would have accomplished a lot. Instead, the committee was granted $10,000 by the Erie Community Foundation, and put a commercial installation on the air, too, well within the year. This was possible only because the 15 committee members and consultant Dick Bomboy, WA3USH, spent more hours than they care to remember meeting, discussing, arguing and working. I hope sometime in the future to individually identify each person who helped, but, quite frankly, I'm reluctant for fear of omitting somebody's name.
The committee hopes to keep improving and maintaining the repeater, and we wish to hear what you want. From time to time you'll hear special announcements on the repeater about committee meetings, most likely on Tuesdays. Come and see us with complaints and suggestions.
We hope to make a presentation on the repeater and its capabilities in the near future, and to publish simple operating instructions.
As for the 146.22/82 machine, we're still seeking a suitable site and hope to put the old 61 machine on the air, after a factory alignment, as 82.

Pg 1

QUA-RAE

The Official Journal of The Radio Association of Erie

May 1989

FIELD DAY JUNE 24,25 !

The R.A.E Inc
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V.PRESIDENT	Don Kelly	KA3QDM
SECRETARY	Clark Coho	N3DVY
TREASURER	Matt Rizzo	KA3PEJ

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Chester Kanis	KB3P	
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Richard Waldinger	NI3Q	
Mark Bronson	KD2HG	

Robert Schwimmer N3FAW
129 East Arlington Rd.
Erie PA 16509
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CW-75	75 feet	$9.75
CW-140	140 feet	$15.95

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$38.00 pr.

T-40 7MHz Trap used for making 5-Band Antenna (80, 40, 20, 15, 10 Meters).

T-80 3.5 MHz Trap used for making 2-Band Antenna (160, 80 Meters).

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LC-40	Shortens 40 Meter Antenna to approx. 38 feet overall	$21.95 pr.
LC-80	Shortens 80 Meter Antenna to approx. 69 feet overall	$21.95 pr.
LC-160	Shortens 160 Meter Antenna to approx. 100 feet overall	$22.95 pr.

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PUBLIC SREVICE

ERIE RUNNERS CLUB ½ MARATHON on Sunday, July 16 at 7:30 am.

ERIESISTABLE MARATHON on Sunday September 17.

For more information or to offer your assistance call Barb. KA3JTD.

LATEST FCC-ISSUED CALLSIGNS

(third call district)

Extra.....NU3H
Advanced.....KD3ME
Tech/Gen.....N3GYP
Novice.....KA3UJR
from The ARRL Letter

HF PACKET RADIO COOPERATIVE DESIGN INITIATIVE

The ARRL has announced the creation of a new project to develop the next generation of modems and protocols for HF packet radio transmission. The project will coordinate the efforts of amateur radio designers whose proposals are adopted by the ARRL. Modest funding will be available for reimbursement of approved direct out-of-pocket expenses relating to the development of prototypes, but not labor, overhead or other costs.
Overall funding for this project is to come from two sources. One is from the ARRL Technology Fund, which welcomes individual and corporate contributions. Also, the League has applied to the Federal Emergency Management Agency (FEMA) for a small grant to help underwrite this project.
Serious designers interested in participating in this development project may obtain further information from Lori Weinberg at ARRL HQ. General information concerning this project may be found in the May issue of QST on pages 54-55.
(from The ARRL Letter)

Qua-Rae CLASSIFIEDS

Find that elusive piece of radio equipment that you've been searching for -or- Get rid of that extra rig or tuner or bug or whatever that thing is lurking under the stairs, in the *Qua-Rae Classifieds*. Ads are free to RAE members and they're so easy to place. Call Kevin, WB3KKT via phone, packet-145.01, or US mail.

YOU CAN BE A QUA-RAE NEWS SCOUT !!!

Have a newsworthy item, or have you seen an interesting article in another publication? Maybe you've just finished an antenna project or have a tip to share with the Amateur Community. Don't be shy... scribble it down on a piece of paper, send via packet radio or just call your story in to me and your ideas will be printed in the Qua-Rae.
You'll receive instant notoriety as Qua-Rae is delivered to over 200 homes NATION-WIDE via our state-of-the-art distribution network (USPS).
Don't delay,,Call today. Operators are on duty now!(WB3KKT-145.01mhz).

COMMUNICATIONS MARKET

"Electronics"magazine published this U.S. market report for communications equipment (1989 predicted).

	1987 $$	1988 in millions	1989 $$
Amateur	32	34	37
Aviation	179	202	221
Broadcast equipt	879	925	1025
Land Mobile	1470	1700	2010
Marine Mobile	182	197	226
Microwave	588	670	763

THE SUN

Based on a study of sediments layed down in Australia, the Sun's cycle of activity has maintained a steady rythm averaged 11.2 years for over 600 million years--Electronic and wireless world, Feb 1989.
Tnx to NA3I and "The Next Issue"

GENERAL MOTORS HAM SURVEY UNDERWAY

Do you operate your ham rig mobile from a GM truck? If so. GM is looking for some information from you.
General Motors is conducting a survey of Amateur Radio use in medium and heavy trucks. If you operate your rig in one of these units. please write and describe the bands you operate on. the power output and antenna location. Send responses to the following address:

EMC Department
General Motors Proving Ground
40 - EMC
Milford, MI 48042

tnx to RaRa Rag and ARRL Letter -ed

VE FCC EXAMS

June 3, July 1. Villa Maria Colleg at 8:00am. *Upgrade this summer!*

RAE BUSINESS MEETING MAY 4 1989
RED CROSS BLDG PITTSBURGH AVE ERIE PA

PRESENT

DIRECTORS	OFFICERS
Jim Ferguson KZ3C	Chris Robson KB3A
Chester Kanis KB3P	Don Kelly KA3QDM
Joe Pearo WB2ICS	Clark Coho N3DYY
Dick Waldinger NI3Q	Matt Rizzo KA3PEJ
Kevin McKenna WB3KKT	

ABSENT

Mark Bronson KD2HG
Bob Schwimmer N3FAW

There were 26 members attending and 3 visitors. Chris Robson opened the meeting at 7:30PM Roger Kegan and Donna Powell from the French Creek Council of the Boy Scouts of America expressed appreciation for the RAE communications at the recent Presque Isle Walkathon.

REPORTS:

BOARD OF DIRECTORS: Kevin Mckenna reported for Chmn Bob Schwimmer:

- Field Day plans underway per Don Kelly
  - Dave Alexander KA3PMW Chairman
  - Two sites being considered
  - No commercial displays
  - Must stick to$100 budget
  - Alcoholic beverages not condoned
  - No club-sponsored baby sitting service
- Approved sale of Spectrum rptr & 275ft of coax with min bids of $500 and $225 respectively.
- There will be no Mall event on Mother's Day
- Life membership fund $2500 move from savings accnt 5 1/4% interest to a CD with higher rate.

PUBLIC SERVICE:

- Chester Kanis reported that the Erie Runners Club request communication services -3 hours - for the One Half Marathon on Sunday July 16 7:30AM. Approval granted.
- Joe Ciano K3IVG reported that our communication services are again requested for this years Eriesistable Marathon on Sunday Sept. 17. Approval granted

REPEATER COMMITTEE: per Tony Zona WB3KGT

- Rick Cutter WA3MKT has donated a 440mhz control receiver and the services to maintain it. It will be installed in place of the present Master Pro. A letter of appreciation and thanks was authorized.
- The committee is looking for a new tower for the installation.

TREASURER: Matt Rizzo submitted a report covering April 14 toMay 4 1989 summarized as follows:

Receipts	$748	Disbursements	$1301
Net Change	$533	Tot All Cash Accnts	$8644

OTHER ITEMS:

- Don Kelly reported that there are only 4 more sets of magnetic signs for communication vehicle identification

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They are available at $8.50 a set. No more will be ordered unless a large order is forthcoming from an outside group or club.

- He also reported that we were well represented on the switchboard at the WQLN auction. A good time was had by all.
- Finally Don reports that Tom Bachler of the Red Cross announced an American Red Cross Day at the Orioles baseball game on June 23 at 7PM. Tickets at $5.00 are now available. In addition to the game there will be special events and prizes awarded.
- Jim Ferguson reported that the Civil Air Patrol are in need of a 30ft tower.
- Dick Blasco KY3D won the 50/50

HAMFESTS

- Breeze Shooters Sunday June 4 8AM-4PM
  White Swan Amusement Park near Pittsburgh International Airport on Pa Rt 60.
- Lancaster NY Sunday June 4 8AM-5PM
  Depew Grove 271 Columbia at French Rd
  Depew NY
- Batavia NY July 9
- Warren Oh August
- Butler Pa September 10

6-89
1/4

Qua-Rag

The Official Journal of The Radio Association of Erie

June 1989

FIELD DAY JUNE 24-25

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Jim Ferguson	KZ3C	
Kevin McKenna	WB3KKT	
Richard Waldinger	NI3Q	
Mark Bronson	KD2HG	

Kanis

Frank

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T-40 7MHz Trap used for making 3-Band Antenna (80, 40, 20, 15, 10 Meters).

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6-1989
3/4

RAE BUSINESS MEETING JUNE 1 1989
RED CROSS BLDG PITTSBURGH AVE ERIE PA

PRESENT

DIRECTORS	OFFICERS
Jim Ferguson KZ3C	Don Kelly KA3QDM
Chester Kanis KB3P	Clark Coho N3DYY
Joe Pearo WB2ICS	Matt Rizzo KA3PEJ
Kevin McKenna WB3KKT	

ABSENT

Mark Bronson KD2HG	Chris Robson KB3A
Bob Schwimmer N3FAW	
Dick Waldinger NI3Q	

There were 17members attending.
Don Kelly opened the meeting at 7:30PM

REPORTS:
BOARD OF DIRECTORS: Kevin Mckenna reported for Chairman Bob Schwimmer:
•Field Day **June 23-24** plans will be announced in detail in the next QUA RE including a map of the location which will be at WB3KGT Tony Zona's QTH on Dorn Rd.
• As to the previously reported sale of the Spectrum rptr & coax, details of the bidding schedule will be reported in the next QUA RE.

PUBLIC SERVICE:
•Hamot 10K will be held **June 4**. Operators will meet at 7:45AM at McDonalds 5th & State
•Edinboro Triathalon participation was approved. It is sched for **June 10**. Call Barb Crotty KA3JTD 899-2470 for details.
•Erie Hunt & Saddle Club-Horse Trials, Franklin Center **June 17-18** 7:30AM to 12:00N. Meet at the club house
•Erie Runners Club for the One Half Marathon on Sunday **July 16** 7:30AM-12:00N. Approval granted. Call Barb formeeting location.
•Eriesistable Marathon on Sunday **Sept. 17**. Approval granted. Joe Ciano K3IVG says we need 50 operators. We will probably need help from Crawford County amateurs.

MEMBERSHIP:
Jim Spinks KJ3L reported there are 160 members

PROPERTY CUSTODIAN:
•Gene Rogowski KA3EZV reports that Argosy and the Robot are both available for use. New users welcome.

REPEATER COMMITTEE:per Joe Pearo WB2ICS
•The 61 repeater has active autodial and emergency numbers. Autopatch will be available in several weeks as soon as radio communication is established for control operators.
•The committee is still working on 82 repeater facilities. Several locations are being considered.
•Ken Teleis KZ3E is preparing a description of facilities and functions of the RAE repeaters, together with policy and rules of operation. This will be published in the new club directory which is now in preparation.

TREASURER:
•Matt Rizzo submitted a report covering May 4 through June 1 summarized as follows:

Receipts	$106	Disbursements	$259
Net Change	$-153	Tot All Cash Accnts	$7498
Transferred Savings to 6mos CD			$1000

•Jim Spinks asked the status of the Capital Fund Trustees in monitoring the investments of all capital assets. It was felt that any change in rules of procedure or personnel should be considered by the Directors.

OTHER ITEMS:
•Joe Ciano attended a very interesting meeting of the Crawford County club. He was much impressed by the large attendance, and of the number of young hams present. He offered to make a presentation in this regard at a future meeting if invited.
•Dave Nordquest KE9ED made the observation that science teachers in various area schools would be very interested in presentations about amateur radio and that we should consider it in future plans.
•Bert Van Houten W3TPW announced that the QCWA is planning a flea market of used ham equipment. A percentage of the sale prices could be donated to the QCWA. It will be held **July 8** at his home 631 Sommerheim Dr Erie 16505. Telephone 838-1200.

HAMFESTS
•Batavia NY Genesee RAC **July 9** 6AM-5PM on Rte 98 8mi south of thruway Exit 48
•Pittsburgh North Hills ARC **July 9** 8AM-4PM at Northland Public Library, 300 Cumberland Rd between US 18 and McKnight Rd
•Warren Oh **August**
•Butler Pa **September 10**

6-1989

Qua-Rae CLASSIFIED 4/4

Mini-Quad HQ-1 antenna, Fairly new with 4 extra spokes, balun, 50 ft RG8U coax with connectors and a 30 ft tele-mast. $140.00 for all.
Call Bob,WA3OOM at 866-6516 7pm-9pm.

CDE CD-45-II Rotor System. Approx 5 years old,just rebuilt, works great. Good for medium-sized antennas (abt 8.5 sq ft). $120.00 OBO.
Call Kevin,WB3KKT at 825-5919.

QCWA Flea-market and Bake Sale
Saturday July 8 at 631 Sommerheim Dr. Erie,PA from 9:00am til 6:00pm. Buyers and sellers (ham gear only) welcome. Donation to QCWA from successful sellers requested. Call Bert,W3TPW for more information.

Larsen On-Glass 2m antenna. New in box 1/2 wave. $40.00 Call Mark,KD2HG at 868-3183.

PUBLIC SERVICE

Erie Hunt and Saddle Club horse trials. **June 17-18** 7:30am til 12noon. Meet at the clubhouse on Old State abt a mile East of Rt.98.
Erie Runners Club 1/2 Marathon on **Sunday July 16**, 7:30am-12noon at Presque Isle.
Eriesistable Marathon Sunday Sept 17. Erie-Penninsula area. About 50 ops needed.
Call Barb,KA3JTD for info or to help.

HAMFESTS

July 9 North Hills ARC, Pittsburgh, Pa Northland Public Library 8:00am-4:00pm. Free admission and tailgating space.
Warren OH. late August. details forthcoming.

COME ONE, COME ALL
Field Day 1989 is on **June 24-25.** Setup will be Friday evening and Saturday morning. Dave,KA3PMW and his group have been working out the details and a good time is planned for all. There will be plenty of food, drink and plenty of opportunity for operating or just swapping war stories of FDs past. Our location this year is at the home of Tony,WB3KGT at 2485 Dorn Road. To get there; Follow RT.19 South and turn right at the first road past New Motors (Dorn) and follow the signs. Follow the driveway all the way back behind the house to FD.Please try not to make too much noise when driving past the house at night and lets do our best to leave the area as we found it. Let common-sense prevail. If you'd like more information, call Dave,KA3PMW or Don,KA3QDM. See you there!

MEETING SCHEDULE/PROGRAMS

The July business meeting will be held on **July 6, 7:30pm** at the Red Cross bldg and will feature **Ron Jakubowski, K2RJ** of Antenna Specialists who will present a program on the Effects of Sunspot Cycles on HF Propagation.

The August business meeting will be held on **August 6, 7:30pm** at the Red Cross bldg and will feature **Tim Duffy, K3LR** who will present some ideas on antennas and contesting.

If you would like to give a presentation or know someone who would, call Don Kelly,KA3QDM. Amateur radio, computing, stargazing, any subject you think would be of interest to the group. Also, if you'd like to see a presentation on a certain subject we'll try to set one up.
Remember--Give a little,,Get a little.

RAE SUMMER PICNIC

Will there be one this year? It's getting late but there's still time to pull it off if *WE* want to. Come to the July meeting and let us know what you think.

Volunteer Examination Schedule 1989

FCC exams are given the first Saturday of each month at Villa Maria College. Bring you original license and a copy along with a check for $4.75. Walk-ins are welcome. Exams start at 8:00am on the following dates:

July 1	October 7
August 5	November 4
September 2	December 2